

What is claimed is:

1. A dental implant system comprising  
an expandable polymer sheath suitable  
for placement within a jawbone; and  
5 a rigid implant fitting within the  
polymer sheath and causing expansion of the polymer  
sheath when fitted within the sheath.
2. A system as in claim 1  
wherein the polymer is Ultra High Molecular  
Weight Polyethylene.
3. A system as in claim 1  
wherein the polymer is Polypropylene.
4. A system as in claim 1  
wherein the polymer is High Density  
Polyethylene.
5. A system as in claim 1  
wherein the polymer is Polyurethane Elastomer.
6. A system as in claim 1  
wherein in the implant is made of  
titanium or an alloy thereof.
7. A system as in claim 1  
wherein the implant is made of stainless  
steel or an alloy thereof.
8. A system as in claim 1  
wherein the polymer sheath has an  
exterior surface that is ribbed.
9. A system as in claim 1  
wherein the polymer sheath has an  
interior surface that is threaded, and  
wherein the implant has an exterior  
5 surface that is threaded, and  
whereby the interior surface of the  
polymer sheath mates with the exterior surface of the

implant when the implant is fitted within the polymer sheath.

10. A system as in claim 1  
wherein the implant is tapered.

11. A system as in claim 1  
wherein the implant is ribbed.

12. A system as in claim 1  
further comprising an abutment adapted to be  
fixed to the rigid implant, the abutment permitting  
attachment of a dental prosthesis.

13. A system as in claim 12  
wherein the polymer sheath, the implant, and  
the abutment, when coupled together and inserted within  
a jawbone, form a support structure that permits  
5 attachment of a dental prosthesis.

14. A system as in claim 13  
wherein the prosthesis is a single crown.

15. A system as in claim 13  
wherein the prosthesis is a bridge.

16. A system as in claim 13  
wherein multiple support structures support  
a dental prosthesis.

17. A system as in claim 16  
wherein the prosthesis is a bridge.

18. A system as in claim 1  
wherein expansion of the sheath upon  
insertion of the implant results in immediate stability  
of the sheath within the jaw bone.

19. A system as in claim 13  
wherein the support structure and prosthesis  
can be inserted in a single office visit.

20. A method of installing a dental  
prosthesis comprising the steps of:

providing a system as in claim 11;  
preparing a site within a jawbone;  
5 inserting the polymer sheath into the prepared site;

inserting the implant within the sheath,  
thereby causing expansion of the sheath within the jawbone;

10 coupling the abutment to the implant;  
whereby the sheath, the implant, and the abutment form a support structure for a dental prosthesis; and

attaching a dental prosthesis to the abutment.

21. A method as in claim 20 wherein the prosthesis is a crown.

22. A method as in claim 20 wherein the prosthesis is a bridge.

23. A method as in claim 20 comprising the further step of:

implanting a plurality of support structures into the jawbone.

24. A method as in claim 23 further comprising the step of

attaching a bridge to the support structures.

25. A method of inserting a dental implant comprising the steps of

providing a system as in claim 1;  
preparing a site within a jawbone; and  
5 inserting the polymer sheath into the prepared site; and

inserting the implant within the sheath, thereby causing expansion of the sheath within the jawbone.